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**From:** Mance, Cassandra [mance.cassandra@epa.gov]  
**Sent:** 5/12/2022 4:07:30 PM  
**To:** Terriquez, Joe [terriquez.joe@epa.gov]  
**Subject:** FW: 40 CFR Part 63, Subpart UUUUU - LEE Status PM Testing

Just an FYI on the New Madrid facility in Missouri...

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**From:** Burns, Ward <Burns.Ward@epa.gov>  
**Sent:** Thursday, May 12, 2022 10:33 AM  
**To:** Sidebottom, Steve <Steve.Sidebottom@dnr.mo.gov>  
**Cc:** Postma, Scott <Postma.Scott@epa.gov>; Vander Veen, Josh <josh.vanderveen@dnr.mo.gov>; Mance, Cassandra <mance.cassandra@epa.gov>  
**Subject:** RE: 40 CFR Part 63, Subpart UUUUU - LEE Status PM Testing

Steve,

63.10006(b) says:

Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost.

Note the following:

- Where 63.10007(a)(2) talks about site specific normal operations it is talking about what load the unit has to operate at during the test.
- If you look at Table 9 you will see that 63.7(e)(1) does not apply. Neither do the SSM exemptions in 63.6(f)(1) and 63.6(h)(1).
- Response to comments 51 and 52 in the Dec. 2011 EPA's Responses to Public Comments Vol 2. on the MATS rule said:
  - As noted elsewhere in the responses to comments, emissions created during process startup and shutdown are not included in the compliance calculations. All other periods are considered normal process operations during which the emissions limits apply.

So there is no violation but I think they have lost their LEE status and will need to return to quarterly testing.

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**From:** Sidebottom, Steve <Steve.Sidebottom@dnr.mo.gov>  
**Sent:** Wednesday, May 11, 2022 11:09 AM  
**To:** Burns, Ward <Burns.Ward@epa.gov>  
**Cc:** Postma, Scott <Postma.Scott@epa.gov>; Vander Veen, Josh <josh.vanderveen@dnr.mo.gov>  
**Subject:** 40 CFR Part 63, Subpart UUUUU - LEE Status PM Testing

Hi Ward,

I hope you are doing well. The Testing and Emissions Unit recently reviewed a performance test report for AECI's New Madrid Power Plant, located at 41 St. Jude Road, in New Madrid County, in Marston, MO. On December 7, 2021, New Madrid tested Emission Unit EU0020 (Main Unit Boiler #2) for filterable particulate matter (FPM) to verify compliance with the following 40 CFR Part 63, Subpart UUUUU standards:

"§ 63.9991(a) - Table 2 to Subpart UUUUU of Part 63 - Emission Limits for Existing EGUs, 2. Coal-fired unit low rank virgin coal, a. Filterable particulate matter (PM) =  $3.0E-2$  (0.030) lb/MMBtu or  $3.0E-1$  (0.30) lb/MWh-based on Gross Output."

and reported a three test run average Filterable PM Emission Rate of 0.0207 lbs/MMBtu. (Demonstrating compliance with the standard.)

and for LEE status:

"§ 63.10005(h)(1)(i) - For all pollutants except Hg, performance test emissions results less than 50 percent of the applicable emissions limits in Table 1 or 2 to this subpart for all required testing for 3 consecutive years; or..."

reported a three test run average Filterable PM Emission Rate of 0.0207 lbs/MMBtu. (Failing to test less than 50 percent of the applicable emissions limit.)

New Madrid reported:

"...during this testing a malfunction of the ESP occurred and Unit 2 was retested on 12/16/2021. The nature of this malfunction occurred due to ash buildup in the ash hopper, causing the hopper to no longer discharge ash properly. The ash buildup caused bridging of the energized wires of the ESP. This bridging resulted in shorting out of the wires and loss of individual fields of the ESP. This buildup of ash will eventually cause the complete loss of the pollution control system. On 12/07 during the third run (13:14- 15:30) while PM testing on Unit 2 bridging started to occur due to ash buildup in the hopper. This build up started to cause ESP fields to fail resulting in a spike in opacity at 15:07. In an effort to keep the ESP in operation a preventative maintenance activity was performed to allow the hopper to discharge freely. This activity is performed by inserting a steel rod through a 2 inch port and moving in all directions to dislodge the blockage from the hopper. The event lasted for ~ 40 minutes before the opacity readings returned to normal at ~15:47 (17 minutes after the conclusion of the PM test). The reduced function from the failed (and other failing) fields resulted in a spike in PM during the third run of the testing on New Madrid Unit2."

"this is a very infrequent event. It only occurs around 3 or 4 times a year."

For LEE status testing, New Madrid met all LEE criteria with the exception of the higher FPM observed during run 3 of the testing conducted on December 7, 2021. Although the operating conditions New Madrid experienced during run 3 do not appear to be that of a true malfunction, the conditions are not normal operating conditions. For the purpose of testing to demonstrate compliance with §63.10007(a)(2) which states:

"If you conduct performance testing with test methods in lieu of continuous monitoring, operate the unit at maximum normal operating load conditions during each periodic (e.g., quarterly) performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run."

Based on the information New Madrid provided, during test run 3, operating conditions of Main Unit Boiler #2 were not representative of site specific normal operations. This being the case, New Madrid retested Main Unit Boiler #2 on December 16, 2021, and meeting all LEE criteria, reported a three test run average Filterable PM Emission Rate of 0.010

lbs/MMBtu. Being that New Madrid was able to quickly retest Main Unit Boiler #2 within the same operating quarter, are you aware of any condition/criteria that would not allow New Madrid to continue FPM testing for LEE qualification?

Please advise?

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*We'd like your feedback on the service you received from the Missouri Department of Natural Resources. Please consider taking a few minutes to complete the department's Customer Satisfaction Survey at <https://www.surveymonkey.com/r/MoDNRsurvey>. Thank you.*